



Technical Mapping Advisory Council

Minutes Portland, Oregon Meeting May 27 – 28, 1999

Call To Order

The Chairman called the meeting to Order at 8:30 a.m. A quorum was present. Members in attendance were:

Mark Riebau, ASCE, Chairman
Peggy Bowker, NFDA
Mike Buckley, FEMA
Kari Craun, USGS
Donald Hull, AASG
Brian Hyde, ASFPM
Wendy Lathrop, ACSM
Al LeQuang, Freddie Mac
Mike Moye, NationsBank

Curt Smith attended the meeting on behalf of Charles Challstrom representing NOAA.

Technical Advisors, FEMA staff, and contractors in attendance were:

Bill DeGroot, UDFCD
Mike Grimm, FEMA
Dave Hill, HAZMED
Michael Lippman, HAZMED
Matthew B. Miller, FEMA
Mary Jean Pajak, FEMA
Al Romano, Michael Baker
Jeff Sparrow, Dewberry and Davis
Randal Strauss, NEMA
Ken Zwickl, USACE

Others in attendance during all or part of the meeting were:

Scott Edelman, Hayes, Seay, Mattern & Mattern
Michael Armstrong, FEMA
Joe Chapman, Hayes, Seay, Mattern & Mattern
Michael Dawson, FEMA
Ted DeBaeno, Owen and White, Inc.
John Fisher, Hayes Seay, Mattern & Mattern
Lisa Holland ASFPM
Alan Lullof, Wisconsin Department of Natural Resources
Jim Murphy, Michael Baker, Inc.
Larry Olinger, Dewberry & Davis
Howard Pike, NYSDEC
10 members of the public

It was announced that Randall Strauss would be replacing Brian Dunnigan as Technical Advisor for NEMA. Members Charles Challstrom (NGS/NOAA) and Kevin Hickey (Fannie Mae) were unable to attend.

Lisa Holland (ASFPM Chair) welcomed the Council and those in attendance to Portland. She announced that the Council would be introduced at the 10:00 a.m. Closing Session of the ASFPM and that Chairman Riebau would be given an opportunity to address the plenary session.

Approval of Minutes of April 8, 1999 Teleconference Meeting

Mark Riebau said the first item on the agenda was the Minutes from the April 8, 1999 Teleconference Meeting. He noted a minor editing correction that was needed for Item 5 on page 2. Brian Hyde added that the text on line 8, page 2, had "five issues" when in fact there were six issues, and this needed to be corrected. Mark Riebau said that without objection, the corrections would be made.

Wendy Lathrop made a motion to approve the Minutes of the April 8, 1999 Teleconference Meeting, as amended, that was seconded by Kari Craun. The motion carried unanimously.

General Business

Wendy Lathrop noted that the status of the mortgage surcharge to support the Map Modernization Program (MMP), and a report from FEMA on the surcharge, needed to be added to the Portland Meeting Agenda. Mark Riebau said that without objection it would be added.

Mike Buckley reported that the Administration has approved a draft bill instituting a \$15 mortgage transaction fee to help pay for mapping improvements. There has been no action in Congress on this matter, nor has any bill been introduced at this time. Funding would be subject to Congressional Budget spending caps. He reported that concerns raised at last week's National Flood Conference indicated that charging only mortgagor holders would be unfair because it won't spread the costs among everyone that benefits from these mapping improvements.

Mike Moye and Al LeQuang expressed the view that the most appropriate source of funding would be from appropriations. Al LeQuang stated he believed the proposal was inequitable. He asked why the Administration spends tons of money on other issues, but cannot find the money to fund this program? Mike Moye suggested a grassroots effort to help lead to another funding source such as general funds. Discussion centered on the concern that the fee would not be fair or equitable. Mike Moye also raised the issue of costs relating to changing existing forms, training, and systems reprogramming. He said that Chase Bank has reported costs of \$750,000 simply to change one line on a procedure guide when all aspects of the change are taken into account (e.g. programming, printing, distribution, training, implementation). Talking points on the issue of the fee were distributed.

Peggy Bowker asked if FEMA had any other funding alternatives in mind. Mike Buckley responded that FEMA had not put forth any alternative, but those options could include direct appropriations, emergency appropriations, or borrowing. It was noted that it was inappropriate for the Council to recommend a specific method.

Peggy Bowker asked what could be spent in a year on this issue - \$20, \$50, 100 million? Matthew Miller responded that to get a good program \$150 million could easily be tasked. It was noted that Congress typically provides FEMA with 2-year money for flood mitigation assistance. Between 1976 – 1981 FEMA spent an equivalent amount of money as what was being proposed for MMP.

Mark Riebau directed the discussion back to the possible grassroots efforts by lending institutions. Michael Moye stated that the National Lenders' Insurance Council (NLIC) would attempt to start one. He said that a one-page document on the importance of the MMP had been drafted. He also added that bringing the map update issue before the media could be useful.

Address by Michael Armstrong

Mr. Michael Armstrong, FEMA Associate Director for Mitigation, addressed the Council.

Mr. Armstrong thanked Council Members for their hard work. He said that mapping issues have gone way beyond what anyone had ever envisioned. He added that maps are not just for insurance rates, but that they are vital for protection of people and property. He stressed increased involvement at the local level. He informed the Council that Director Witt was keenly interested in the MMP and the Cooperating Technical Communities Initiative (CTC). He added that Director Witt would continue to enhance State and local capabilities and bring in new partners on all FEMA concerns.

He emphasized the need for future planning and the need to take steps to ensure we grow smartly to make communities more disaster resistant. He reviewed the amazing progress that has been made nation-wide under Project Impact where newly forged partnerships are focusing on pre-disaster mitigation. He again praised the Council, said they were doing an excellent job, and that FEMA's relationship with the Council has become one of mutual respect. He added that the Council helps keep FEMA accountable on mapping concerns. He also added that he and Director Witt rely heavily on Council Member Mike Buckley when contacting Congressional offices on mapping issues. He concluded by saying the cornerstone of mitigation is mapping.

Unnumbered A-zones

Alan Lulloff gave a presentation to the Council on the GIS capabilities in the State of Wisconsin. He said that the quality of the Flood Insurance Rate Maps have been the major impediment to local communities implementing and enforcing floodplain zoning. He added that counties are improving base mapping and provided Winnebago County as an example. That county has developed digital two-foot contour maps and has digitized all building footprints and parcels in the county. He added the Wisconsin DNR applied for a grant from FEMA to provide the county with floodplain maps that fit the county GIS system. He did mention that a major problem in redelineating floodplain boundaries to fit improved topographic information was unnumbered A-zones. These unnumbered A-zones do not have elevations that can be matched against digital topographic data. Wisconsin DNR modeled these approximate areas using a software package called BOSS Hec-2 for Autocad. USGS regression equations are used to establish the flows needed for the hydraulic modeling. While the analysis was not comprehensive enough to be deemed a detailed study, BFEs were developed that were then used to redelineate floodplain boundaries that fit the improved county topographic mapping. The county was very pleased with the final product. Giving communities a data layer that fits their GIS systems

makes a significant improvement in their ability to make floodplain determinations.

Peggy Bowker asked if this information was ever submitted to FEMA? Alan Lulloff responded that it had been. A package was submitted including an addendum with sources of information and identifying which BFEs had been established. Some of the engineering models were updated. Unnumbered A-zones were redelineated based on the improved topography. The modeling developed for the unnumbered A-zones was not submitted as a detailed study. These data are currently being reviewed by FEMA's Technical Evaluation Contractor. Peggy Bowker also asked if a process to fix the unnumbered A-zones has been developed? Alan Lulloff noted that a process similar to the Winnebago County pilot project could be used in other areas if adequate digital contour data were available.

Matthew Miller noted the importance of the digital elevation model (DEM). What is the process for getting the DEM? What is the cost issue? Alan Lulloff added that the County already had a digital terrain model (DTM). Mr. Lulloff said the difference between a DEM and a (DTM) was found to include the loss of breakline data in a DEM. He also said spiking can be a big problem with DEM data and less of a problem with DTM data. He added that breakline and mass point data are as important as the contour data. For example, with a peninsula going out into the lake, nuances are lost without all the data. The digital terrain model is part of an existing community initiative.

Mary Jean Pajak asked how many counties are there in Wisconsin and how many have DTMs? Alan Lulloff responded Wisconsin has 72 counties and orthophotography covers just under 2/3 of them. When orthophotography is generated, DTM is also provided. It costs money however, to go from a digital photo to the DTM. About ten counties in Wisconsin have DTM data. Alan Lulloff indicated that the generic term Digital Orthophotos (DOP) should be used instead of the term Digital Ortho Quarter Quad (DOQQ). County-developed digital orthophotos are registered to townships and not 7.5-minute quads. Counties do not like to use quarter quads; instead they tile their photos by townships. Alan Lulloff indicated that Wisconsin feels that a higher preference for restudying areas and redoing the mapping should be given to communities with digital orthophotos because FEMA's costs for base mapping would be substantially reduced. In addition, he suggested that FEMA work closely with states because they are the best resource as to where improved digital contour data is available.

Kari Craun noted that USGS does not produce Digital Orthoquads (DOQ's) at a resolution smaller than 1 meter per pixel. The aerial photography used to produce standard uses DOQs are flown at 20,000 feet.

Mark Riebau asked how many LOMAs have been granted in unnumbered A-zones? Matthew Miller responded that there is a number, but he did not have it. LOMAs are difficult to obtain without a BFE.

Break

At 10:00 a.m. the Council broke to attend the Closing Session of the ASFPM Conference.

The Council reconvened at 12:20 p.m.

Unnumbered A-zones (continued)

Scott Edelman made a presentation on a technique that Hayes, Seay, Mattern & Mattern (HSMM) is using to improve the mapping of unnumbered A-zones on countywide restudies they are performing for FEMA. He explained that the new process utilizes the best available digital topographic information to redelineate all of the floodplain boundaries in an entire county, including the approximate boundaries. Concerns were raised on approximate boundaries that if they are off only 1/10 of inch on the map, they could be off one or two hundred feet on the ground in mountainous regions. This problem occurs frequently when approximate boundaries are "fit" to new base mapping during the conversion of a countywide study. Scott Edelman said that their new method uses the best available DTM to develop a hydrologic analysis and create HEC-RAS models to calculate "approximate" flood elevations for the unnumbered Zone A areas. Updated 100-year floodplain boundaries are developed from these "approximate" models and plotted on the digital topographic data. This ensures that these new flood boundaries will agree with the most up to date topographic data available (whether it is 1 foot or 40 foot contour interval data).

Kari Craun asked what types of tolerances are allowed for acceptance/rejection of elevation data? Scott Edelman responded that FEMA currently specifies a minimum accuracy of 4-foot contours for new detailed study streams. Often, 4-foot contour data may not be accurate enough for certain areas. Any time the error margin is greater than 1 or 2 feet, there are bound to be instances where the accuracy of the maps can be questioned. The technology exists to develop very accurate topographic data, but cost/benefit issues dictate the levels actually used for each community.

He explained to the Council that HSMM's process also relies on the ability to track the source of the data used to develop the analysis and mapping and to automate the updating process when new information becomes available. For example, a study is developed using 5-foot contour data and two years from now 2-foot contour data becomes available. The new topographic data can be used to replace the old data and the analysis can be revised to reflect this new data.

The flood elevations will be updated and new boundaries plotted on the updated topo maps. In essence, countywide maps could be updated overnight.

Brian Hyde asked if this methodology is applicable only to open channels and if there was anything special being done with bridges and culverts? Scott Edelman explained that the current method for performing the "approximate" analysis does not include any evaluation of bridges or culverts, typically because the funds are limited and no fieldwork is performed. The system will allow the user to define a fixed head loss to apply at structures (e.g. 2 feet of backwater at every bridge location). But this head loss estimate would have to be developed from other detailed studies of streams where better field data is available. In addition, since no field survey work is performed as part of the approximate models, the channel portion of each cross section is not obtained. This information cannot be obtained from the aerial photography used to prepare the topographic mapping.

Scott Edelman informed the Council that he was under contract with FEMA to do 7 or 8 more counties throughout the southeast where this approximate modeling would be performed countywide. In the State of Maryland, there is an effort underway to test LIDAR vs. traditional methods for obtaining topographic data. Non-standardization is a real issue. FEMA is working on this issue. If a system is designated it needs to be input into whatever system the analyst is using. Spiking is a big problem with elevation data. DTMs help avoid the bulk of these problems. Right along the coast in South Carolina DTM has been used and this has not been much of a problem. He added that hydrology is the biggest problem. To ensure reasonableness in the approximate study areas, high water marks are used for "reality checks." This calibration effort lends a lot more credence to the results that are eventually placed on the maps. With a little more money and effort the calibration of LIDAR can be improved. Once a DTM is developed, it does not become a throwaway product. It can be updated with more accurate information for even just a portion of the area, at a later date.

Peggy Bowker asked if the new methodology was available in a software package or were there proprietary concerns? She added that this should be made available to everyone. Scott Edelman responded that if FEMA likes this direction, an effort could be made to develop a product that could be used by anyone performing studies for FEMA nationwide. Matthew Miller noted that two new initiatives have been added to the list of MMP Technical Objectives: Approximate Zone As, led by Mike Goetz of FEMA's Region 1 office, and Automated H & H (Hydrology and Hydraulics), which Sally Magee is leading. Howard Pike noted that in New York, there is a New York State clearinghouse and a GIS Cooperative where data can be downloaded off a website and used to prevent duplication of data generating efforts. Brian Hyde added that was fine to create these maps, but maps need to be checked for currency of data.

Matthew Miller said it was important to have new mapping information readily available. Kari Craun said there should be some way to acknowledge that new

information is being collected and to encourage sharing of locally generated data. She said the data does not need to be physically located in one place, but having a clearinghouse with information on how to access the data would eliminate duplicative work.

Michael Buckley noted that in this year's Report the Council would like to make a recommendation about what to do with unnumbered A-zones. He asked if the Council had a recommendation at this point? Peggy Bowker said it was necessary to keep up the discussion. Michael Buckley said the Council needs to evaluate needs, come up with strategy, decide what gets studied in detail, and what gets refined. Mark Riebau asked if reference should be made to the process that was presented during the day's discussions. Member consensus was "no". The Council should talk about technology that exists, but cannot provide specific directions.

Matthew Miller added he does not think there is one solution for Zone A. The DTM is a critical component of this effort, but there will not always be one. Perhaps a tool is needed to do better than what has been done to date. Mark Riebau said that visual on-site inspections by state floodplain engineers have been accepted by FEMA with maps published as redrawn and submitted. Brian Hyde added that training or brochures might help individuals involved in this work and process. Peggy Bowker suggested this could be another level in CTC.

Alan Lulloff noted that it is useful to partner with states that can go onsite and look at what is done rather than do it all remotely. Costs can be cut, if areas are targeted with DTMs already available. The amount of DTM that is available is greatly expanding and can allow leveraging of dollars. If we see counties with DTMs at 2 foot, and other counties without 2-foot contours we will work with the areas with data, providing impetus for counties to invest. Brian Hyde asserted that whatever recommendation we produce needs to address hydrology.

Peggy Bowker said that there should be some way besides CRS for local communities to improve local mapping budgets. She suggested funding from FEMA to map a county for countywide mapping.

Cooperation and FEMA/State/Local Partnerships

Mary Jean Pajak updated the Council on the Cooperating Technical Communities Initiative (CTC). She informed the Council that work began in March and a meeting had been held in April attended by each FEMA Region to identify the most important issues. An initial guidance document has been prepared. She added that Partnership Agreements are agreements in principle that there will be cooperation in flood hazard studies. Objectives of the CTC are:

- To recognize the contributions that FEMA's partners (state, regional agencies, and communities) make in assisting FEMA by providing timely and accurate flood hazard information.
- To maximize the use of these partners' contributions so that the limited Federal funding that is available can be leveraged to the fullest extent possible while maintaining consistent national standards.
- To fully integrate contributing partners into the mapping process, with the corresponding authorities and responsibilities.
- To provide training and technical assistance; and to facilitate mentoring for potential partners willing to develop the capability to participate as a CTC partner.

Mary Jean Pajak explained that CTC Task Agreements involve development of flood hazard mapping or a component of the production and maintenance of flood hazard mapping. She reviewed 11 potential activities for CTC partners. She highlighted 5 potential activities that have been identified for the CTC pilot year. They are:

- Refinement of approximate Zone A boundaries,
- Hydrologic and hydraulic modeling and floodplain mapping,
- DFIRM preparation,
- Re-delineation of detailed flood hazard information using updated topographic data,
- Analysis of community mapping needs to support FEMA's Mapping Needs Update Support System.

Mary Jean Pajak reviewed selection criteria and the issue of maintaining the quality of the maps. The goal is to maintain national standards and high quality products. Funding would be through a cooperative agreement. There are existing regulations dictating how the funding is issued. She reviewed funding issues and said that FEMA recognizes this will require a lot of training and technical assistance. FEMA plans to make it available through the Internet as well as providing training materials for the FEMA regional offices. On program management, each region has identified a person to contact to become a CTC. FEMA would like feedback from everyone about the structure.

Kari Craun asked for an explanation of the verification process that ensures data meet minimum specifications. Mary Jean Pajak responded that FEMA was developing template task agreements. Each task agreement would include quality control and quality assurance requirements. There have been discussions on state review and peer review.

It was suggested that CTC could be made more attractive with various incentives, perhaps such as awarding automatic CRS points for signing a CTC. Another incentive could be reduction of a community's cost share when a CTC is eligible for disaster relief. Perhaps they could be credited 50 percent of CTC.

This may be a good way to jumpstart the program. Use of Disaster Relief Fund (DRF) moneys is possible. Mike Buckley said this is an area NEMA is interested in. NEMA may propose giving communities local cost share credit under the 404 program for spending outside the context of a disaster that is mitigation related. There will be a meeting at the Hazards Conference and this will be discussed with Mr. Armstrong. Wendy Lathrop noted that some communities have older urban areas that have different issues including trying to keep their foothold without going bankrupt.

Michael Buckley noted that there is also a proposal that the Stafford Act make reference to map validation using DRF for that purpose. There are those that think it is a good idea and others disagree. Disagreements question if disaster money should be used for mapping purposes thereby circumventing the budget process for mapping. There is an appropriations process and this proposal would be working around that.

Brian Hyde has heard that some people believe that states should be CTC certified or otherwise money will not be available. Is this true? Is preference given to CTC communities? Do we want everyone to be a CTC? Where is the floor to be a CTC or do we have multiple levels?

Matthew Miller feels strongly that CTC should not become a money machine or a political football. He said that a CTC does not get a higher rating. The five-year mapping process should set the need. Objectivity must be maintained. Michael Buckley continued that need is the priority. In reform legislation, there is reference to cost sharing from states.

Money in Fiscal Year 1999 for CTC is from existing cooperative efforts for digital conversion. FEMA has set aside a few hundred thousand dollars for these cooperative agreements. Fiscal Year 2000 money is being targeted for CTCs and it will be based on needs. If money can be allocated, CTCs will get a separate pot of money for restudy.

Alan Lulloff raised the importance of maintaining a H&H repository. This would avoid duplication of resources. Kari Craun added that archives for base maps should also not be duplicated. If the CTC archives base map data, FEMA should not duplicate that archive. Mary Jean Pajak noted that FEMA would not necessarily maintain the archive for data or base maps but would have a pointer to that information. Mark Riebau added that Wisconsin keeps a very good record of work done and their database is an excellent repository.

After discussion concluded, Mark Riebau stated the Council supports the CTC Initiative. Mary Jean Pajak added information about the CTC is on the FEMA website.

New DFIRM Product Standards

Mark Riebau stated that Council Members and Technical Advisors should have received copies of sample maps. He informed the Council that Mike Grimm and Mary Jean Pajak are FEMA contacts for this subject. The Council received a package of 14 prototype graphics for the hardcopy of the maps and efforts are underway to reduce the number of prototypes down to a manageable level. Mark Riebau commented that he has reservations about color if it would be more costly. He added that color maps would require more computer capacity and could be more difficult to transmit. Michael Buckley said that with photobase, it is difficult to use shading variations to designate a different zone. A higher quality printing standard is required which will add cost. Problems are encountered now with just the line work.

The first choice for maps are locally-produced maps that meet FEMA standards. The default nationwide base map is the USGS Digital Orthophoto Quarter Quad (DOQ). Because there are so many communities not using the quad framework, FEMA will accept community produced Digital Orthophotos (DOP). A community produced base map meeting FEMA standards is the first choice, with DOQ as a default.

Kari Craun noted that base scale and accuracy criteria have been established based on the standards for the standard USGS DOQ. Matthew Miller added that some people who use maps fax and copy them. How many customers use it in the black and white form? Wendy Lathrop added that color issues have been tested. Some colors show up better than others when photocopied. Yellow photocopies beautifully. DOQs allow structures to be seen. Most people prefer color on the hazard area (as opposed to color in the non-hazard area). If going for cost, it is necessary to use as little color as possible.

Matthew Miller suggested that for black and white FIRMs, if lines had tick marks on the floodplain side, pointing to flood zone, this might clarify the map. Wendy Lathrop answered that similar tick marks are used successfully on New Jersey riparian claim maps.

The issue of the need to sell the new mapping concepts to community officials was raised. Peggy Bowker asked if FEMA had any idea what any of the proposed new mapping formats would cost to produce and distribute? Kari Craun explained that USGS recovers the cost of printing and distribution of maps, but not the cost of production of the map up to the printing process.

Matthew Miller stated that maps will be available digitally and on paper. He added that electronic products need to be user friendly. Michael Buckley added that everything will be electronic in a few years. It will give the opportunity to print on demand. By its next meeting the Council should have the comments FEMA collected from the first set of map prototypes and FEMA's proposal for the

next round of prototypes. Information on costs will be developed as the choices are narrowed down.

Mark Riebau asked how important road names were on the maps? Alan Lulloff answered that all the detail is very costly. It makes the map very busy also. Peggy Bowker added that half the roads are not even on maps. Wendy Lathrop indicated that line vs. photo will be an issue. Matthew Miller responded that TIGER can produce names, but they need to be positioned to stay off of BFE labels. Should FEMA be charged with correcting road names and locations on FIRMs? Even though it is not FEMA's responsibility, if names are wrong it will be a problem. As layers are used in a GIS environment, the information contained can be turned on and off from photo to TIGER. Maps do not line up perfectly. When printed, "close enough" creates credibility issues when the public sees that the lines are not perfect.

Wendy Lathrop asked when the Rate Reports would be made available. Matthew Miller said they would be submitted immediately.

Recess

Peggy Bowker moved to recess the meeting until 8 a.m. Without objection it was so ordered. The meeting was in recess.

May 28, 1999

Mark Riebau called the Meeting to Order at 8:00 a.m.

Map Data Quality

Brian Hyde reviewed concerns of map data quality that had been raised early in the week at the ASFPM meeting. (See Appendix B) The concern of unmapped areas was raised. Wendy Lathrop said such mapping gaps have been encountered when military bases are not included. Sometimes boundaries change and a flood zone ends right at that boundary. FEMA is not mapping these areas and there are flood projects around many bases that need this data. Wendy Lathrop also noted that in Maryland the countywide mapping has gaps (e.g. Chevy Chase is not included).

Matthew Miller indicated that many maps do not define the horizontal datum upon which they are based. Brian Hyde noted that benchmarks for vertical control are often disturbed or missing. His agency installed elevation reference markers as part of a study and later found that two original elevation reference study marks were destroyed by snowplows. There is no program to check or replace elevation reference markers. Elevation reference markers are one of the most ignored concerns. Mark Riebau added that no one is restoring them. Matthew Miller thinks FEMA should stop displaying elevation reference marks on

maps and instead refer to the NGS network. Brian Hyde agreed, but we should encourage local or state agencies to accept the responsibility for maintaining and updating a network of markers. The loss of geodetic monumentation is a major problem in re-establishing ties to the original flood studies. Getting community cooperation is critical in this area.

Mark Riebau asked if funding should be requested. He stated that height markers are critical. He asked if manual levels are still necessary with GPS becoming so common? Mike Grimm answered that through the FEMA contract, Dewberry and Davis is working on a Height Modernization study for the NGS. Brian Hyde added that it needs to be carried to the next level. Matthew Miller commented that there had been workshops in North Carolina and somewhere on the West Coast with 50 local government people in attendance. It was noted that NGS has a program to provide expertise in return for travel money and per diem.

They will help bring in the geodetic framework. NGS does workshops. Dave Zilkoski is the vertical guru. Personnel are not available to do this work. As a directorship, the NOAA/NGS Geodetic Advisor Program is something that is required and can assist with the need for geodetic expertise.

Mike Buckley raised the issue of NRCS Dams, which are small dams that are now approaching, or have reached, their useful lives of 50 years. Do you give credit or inform people of possibility of dam failure flood? With 10 thousand dams, this represents an enormous logistical problem.

Peggy Bowker noted that the remaining life of the Council is very short, and time should not be spent on issues for which the Council has already developed recommendations. Brian Hyde noted that the single most important issues are base mapping and unnumbered A-zones. Peggy Bowker and Mark Riebau both commented that the Council has addressed base mapping, but has not yet established a position, or made any recommendations on unnumbered A-zones.

Mark Riebau called for a discussion on alluvial fans.

Alluvial Fans and Eroding Streambeds

Mike Grimm reviewed the recent alluvial fan flooding report that had been distributed to 40 entities outside of FEMA. He told the Council that comments received on the report would shortly be incorporated into a final draft report. He informed the Council that the report would be a living document with changes made when necessary. He added that this approach is different from the "one size fits all" approach and it will be drafted to address the differences in alluvial fan concerns that are evident in various parts of the country. He told the Council that the report would replace Appendix 5 of FEMA 37 ("Guidelines and Specifications for Study Contractors").

Mark Riebau noted that the report is outstanding. Peggy Bowker asked that the Council make a recommendation to support the report even though it is not yet in a final version. Brian Hyde shared with the Council two sets of maps that included new alluvial fan mapping using new hydraulic methodology. He also raised the concern of situations when new maps place a large majority of a community in the alluvial fan floodplain. It is different geologically and methodologically from placing much of a community in a traditional riverine floodplain. He cited examples of mapping problems within the communities of Glenwood Springs and Ouray, Colorado. He also raised the issue of the need for different insurance and regulatory requirements for alluvial fan floodplains (as distinguished from traditional riverine floodplains) and the need to develop local technical standards for appropriately evaluating proposed mitigative actions. He added that States and local governments should be given the opportunity to review and approve the new mapping methodology. These entities should also be involved in developing proposed insurance and regulatory requirements for alluvial fans as well as technical standards for the evaluation of proposed mitigation.

Wendy Lathrop asked if alluvial fans were mapped as risks or are they all A-zones? Mike Grimm responded there had been controversy in placing the same risks on all fans since that risk may differ geographically. Then he added that FEMA, rather than plugging fans into a computer program and placing them on the maps, has developed an approach that recognizes the geographical variability. Donald Hull added there is a real concern with public acceptance of FEMA maps and the potential for social and political issues in communities if there are maps before the public that are different from FEMA maps. Brian Hyde added that if the maps do not reflect local activities and concerns, communities would notify Congress of this.

Matthew Miller said that Mike Grimm had done a superb job shaking out FEMA 37 on this matter. He added implementation will be the main issue. FEMA will be bringing in engineers more than ever and the Council needs to keep in mind the need for local involvement in implementation of the new maps. Mark Riebau said the Council has addressed this in 1998 Recommendation 4.7.

Al LeQuang said when the National Flood Insurance Reform Act of 1994 came into effect, it effectively stripped flood hazard determination from the appraiser by requiring that the determination be guaranteed for accuracy. The appraisal report, however, still requires the appraiser to identify any and all unique hazards to which the property or community is exposed. The question is, are such hazards identifiable? Appraisers are required to report and comment on any condition that might affect the value and marketability of the property and cause potential buyers and lenders to hesitate in the transaction. Al LeQuang will send Council members a copy of Freddie Mac's appraisal requirements.

Brian Hyde added that alluvial fans and eroding streambeds are unique hazards, as are ice jams. Because of the very uniqueness of these hazards, local and state involvement in the development of the maps and the associated regulatory and insurance requirements and technical standards for mitigation are critical. On-site familiarity with the unique local conditions is also critical. Ice jams might be missed if the appraiser is not there in the winter.

Al LeQuang noted that appraisers are required to be familiar with the areas where the subject property is located. Mark Riebau added that we are also not looking at dam breaks. We ought to identify areas prone to such hazards so that map users recognize the unique hazard. For example, flooding downstream of a failed dam could be greater than if the dam had not been there at all. It would be nice to have dam failure flooding as an extra layer for a GIS. Communities choosing to incorporate unique hazard identification into their FIRMS could be eligible for incentives.

Matthew Miller noted that FEMA has a list of issues that need to be addressed, and the Council should look at the Flood Insurance Study Report. He added the report needs improvement but there is value in the report if it better addresses unique flooding hazards.

At the conclusion of discussion, Mark Riebau said that an update of this issue should be placed on the Agenda for the Louisville meeting in September.

Break

The Council took a twenty-minute break.

July 8, 1999 Teleconference Meeting

Mark Riebau noted that one item not on the Agenda was the need to hold a Teleconference Meeting before the Meeting scheduled for Louisville in September. It was decided there would be a Teleconference Meeting on July 8, 1999, at 2:00 p.m. (EST).

Guidelines for Invited Guests/Role of Technical Advisors

Wendy Lathrop said she asked that this topic be on the Agenda to clarify Council procedures when outside groups or individuals request to address the Council. She added the Council needs to make sure that the concerns brought by outside entities are issues that can be answered by the Council. Michael Moye said there could be some instances where it would be appropriate to deny requests from outside entities to be on a meeting's agenda.

Al LeQuang also said he had raised this issue. He said that any member of the public could attend a Council meeting. The concern here is when the Council has received a request for a formal presentation and what is the Council's procedure in answering such requests. The concern is when a group or individual requests an appearance to discuss a topic, but when they are before the Council it is discovered there is an alternative agenda and a totally different topic is the focus of their presentation.

This issue related to a recent presentation before the Council where members had expected a presentation on mapping issues, but instead heard a presentation on the proposed surcharge for mapping. It appeared to be "bait and switch" situation. Questions were raised if the meeting should be adjourned if this situation reoccurs, or should the Chairman, or a Council member inform the presenter of his or her purpose for being before the Council and to keep comments to that purpose.

Wendy Lathrop suggested that any group who wishes to address the Council should (1) provide the Council with information on the group and (2) an outline of the issues that are to be presented. It will then be up to the Council to decide whether the request becomes an Agenda item or if the Council sends the group information or refers the request to an appropriate source. Mark Riebau said that was a good idea and was right on target. It was also mentioned that a Point of Order could be raised for any subject(s) raised that were not on the meeting's agenda.

New Business

(1) AASG Representation on the Council

Donald Hull informed the Council that he would be retiring in July from his position at the Oregon Department of Geology and Mineral Industries. He said that he did not know how his retirement would impact his membership on the Council, but that he has offered to remain on the Council and expressed a willingness, alternatively, to be replaced on the Council if that was the preference of the AASG. Council Members expressed their concern that Mr. Hull should stay on the Council.

(2) Proposed Rule by HUD

Michael Moyer raised the issue of a proposed rule from the Department of Housing and Urban Development concerning single family mortgage insurance and the clarification of floodplain requirements applicable to new construction. He said that the proposed rule would permit mortgagors to submit an elevation certification showing their property is at, or above, the 100-year flood level rather than obtaining a LOMA or a LOMR. He added that what happens with the proposed rule is of great importance to the Council.

During discussion, Wendy Lathrop mentioned the proposed rule sounds like HUD could be waiving mandatory flood insurance purchase requirements based upon Elevation Certificates rather than LOMCs. Mike Buckley said that under the proposed rule flood insurance would still be required, and Matthew Miller added he was optimistic that HUD was not waiving any flood insurance purchase requirements. He mentioned one concern was the possible importing of fill material to get any new structure at or above the 100-year level. Several Council members agreed that importing fill to get a structure above the floodplain would have serious and unwanted consequences. Mark Riebau stated the proposed rule could make it easier to obtain loans in floodplains and encourage more development in floodplains.

Matthew Miller said that he has met with the Flood Insurance Administration on this issue and he would keep the Council informed of any new developments. Al LeQuang noted that HUD was not covered by NFIRA, and that the only waiver of flood insurance purchase requirements is when there is a LOMA or LOMR issued. Peggy Bowker raised the concern of the proposed rule leading to the placement of low-income housing in the floodplain.

Brian Hyde made a Motion to oppose the proposed rule from HUD concerning single family mortgage insurance and the clarification of floodplain requirements applicable to new construction. Mike Moyer seconded the Motion. The Chairman called for discussion

Wendy Lathrop said she did not want to make any recommendation on the proposed rule until she had a chance to review it. Peggy Bowker raised the issue that having the Council act on the proposed rule is outside the Council's charter. She added it would be important for the membership of the organizations represented on the Council to comment, but the Council's charter is to deal with FEMA maps. It was noted the deadline for comments on the proposed rule was June 29, 1999. Mark Riebau asked if it was fair to say that the Council had concern on how the proposed rule would be implemented. He asked if it would be better to modify the motion to write a letter expressing the concern of the Council on the proposed rule rather than opposing it. Wendy Lathrop said she could support that approach.

Brian Hyde modified his Motion to read that the Council comment on the proposed rule expressing concern about the effects of the proposed rule on floodplains and mapping. The Motion was so modified.

Mike Buckley asked which of the organizations represented at the Council would comment? Wendy Lathrop said that ACSM would comment. Mark Riebau said that he could not say if ASCE would comment, but he would encourage them to do so. Al LeQuang said that Freddie Mac would not get involved with the proposed rule but that he would comment if the Council decided to submit comments. He added that HUD's intent in making the proposal would be very important.

Peggy Bowker asked what was FEMA's position? Mike Buckley responded there is not enough known on the proposed rule to develop a position. Brian Hyde mentioned that the fact we do not know enough about the proposed rule is sufficient cause for the Council to write. Matthew Miller added that FEMA believes the proposed rule needs to be better worded.

Peggy Bowker raised the concern of the difficulty of drafting an appropriate response at this meeting.

The Chairman asked for a vote. By a vote of 5 Yeas and 4 Nays, the Council voted in favor of sending a letter to HUD expressing the Council's concern over the proposed rule. (The letter is Attachment A)

(3) Extension of the Council

Matthew Miller informed the Council that each member has put in 500 hours of work on Council business. He added the Council has been a catalyst for initiating needed changes and that they have accomplished a lot.

Mark Riebau mentioned that under the Council's Charter, the Council would cease to exist on November 25, 2000. He asked if any discussion was needed on possibly extending the life of the Council to January 31, 2001, in order to complete the Council's 2000 Annual Report. Mike Buckley said he would research this and provide a report at the July 8, 1999 Teleconference Meeting.

Other Business

It was agreed that the Council would begin work on its 1999 Annual Report at the Louisville Meeting. Peggy Bowker stressed the need to be more precise in the Council's issues and recommendations, and efforts should be made to consolidate areas wherever possible.

Mark Riebau verified the dates of the Louisville Meeting as September 13-14, 1999 and the Washington, D.C. Meeting as December 6-7, 1999. It was noted that Louisville could be designated as a CTC by the time of the Council's meeting and there could be recognition of this made at that time. Mike Moyer informed the Council that NationsBank has a Conference Room that might be available for the December meeting. He would provide a report to the Council if this could be arranged.

Wendy Lathrop raised the issue of how isolated and individual changes are mapped. If these changes are not reported back, how does the 5-year map update address that? She asked if these changes are ever reflected. Mike Buckley responded that those sorts of changes pose a challenge in LOMA applications. Peggy Bowker added that study contractors are required to ask about any changes that may have been made to the community's floodplains. Mary Jean Pajak said that a better job needs to be done in the initial scoping for a flood study update to include these types of issues.

Brian Hyde asked what is the total number of LOMRs? Matthew Miller responded that over the life of the program, there have been more than 80,000 letters of map changes, including LOMRs, which roughly averages out at 4 or 4.5 LOMRs per each community. Mark Riebau questioned how many of the LOMRs had been issued since 1994. Brian Hyde suggested that the number of LOMRs for each community be added to the 5-year letter. Mike Buckley said there was a form being developed to accomplish that.

Wendy Lathrop stated the discussion was a good start to address her concerns; it is well known there are changes that never get on the maps.

Adjournment

With no further business before the Council, the Chairman stated that a motion to adjourn would be in order.

Michael Moye made a motion to adjourn that was seconded by Kari Craun. The motion carried unanimously and the Meeting was adjourned at 10:55 a.m.

Respectfully submitted,

[original signed]

Mark A. Riebau
Chairman

Attachment A, Minutes May 27-28, 1999

Office of the General Counsel
Rules Docket Clerk
Room 10276
Department of Housing and Urban Development
451 Seventh Street, SW
Washington, DC 20410-0500

Subject: Single Family Mortgage Insurance; Clarification of Floodplain
 Requirements Applicable to New Construction
 24 CFR 200, 203, and 234
 [Docket No. FR-4323-P-01]
 RIN 2502-AH16

The Technical Mapping Advisory Council was created by Congress in the National Flood Insurance Reform Act of 1994 (NFIRA) to provide recommendations to FEMA for improvements in flood maps and flood mapping processes.

We are concerned about the effect of the proposed rule to floodplains, increased risk to lives and property and changes to the way these risks are indicated on Flood Insurance Rate Maps. We urge you to clarify the proposed rule and its intention. In order to accomplish this, we request an extension of the comment period.

Mark A. Riebau, Chair
Technical Mapping Advisory Council

Attachment B, Minutes May 27-28, 1999

Flip Charts from ASFPM Mapping and Engineering Standards Committee Meeting Concerning Map Data Quality

Flip Chart One

Lack of H & H

- community vs. county-wide

No horizontal control

TOPO resolution and age

- reference marks

No data

Scale too small

Unmapped areas

Non-basinwide studies

Level of detail (i.e. structures)

Time frames

Approximate Zone As

Base map inaccuracy

Map distribution

Cost and time

Cooperation partnership different from CTC

- ownership
- meetings
- process

Flip Chart Two

NRCS dams (small flood control dams - 50 years useful life - dam failure)

DOT's

Technical Mapping Advisory Council

Map Quality/Cooperation

5-year update

A-zones

Devolve LOMC's

Flip Chart Three

Why Not More Involvement?

- Timely response from FEMA to local initiatives
- Local lack of knowledge
- Planners need training
- Map revision process too long and too complicated
- Too complicated – need step by step explanation
- Communities do not have money
- Technical expertise
- Apathy
- Fragmented Community programs
- Use of different standards at community level
- Cooperation partnership different from CTC
 - ownership
 - meetings
 - process

Flip Chart Four

How to get more involvement in flood hazard mapping

- Ease & efficiency to produce FIRM
- Provide assistance – technical & financial
- Private sector interest